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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,727	08/19/2003	Shih Ping Chen	MR1957-778	3817
4586	7590	04/23/2007	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			KIM, CHONG R	
			ART UNIT	PAPER NUMBER
			2624	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	04/23/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)
	10/642,727	CHEN, SHIH PING
	Examiner Charles Kim	Art Unit 2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-7 and 25-31 is/are allowed.
- 6) Claim(s) 8,10,11,14-19,21 and 22 is/are rejected.
- 7) Claim(s) 9,12,13,20,23 and 24 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 August 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 8, 10, 11, 17-19, 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Lu, U.S. Patent No. 5,254,390 (“Lu”) and Merry et al., U.S. Patent No. 7,046,804 (“Merry”).

Referring to claim 8, Lu discloses a counterfeit protection document (col. 2, lines 5-23) comprising:

a. an optical curve body (14) and a base (17) located beneath the optical curve body (col. 3, lines 6-16 and figure 1), wherein the optical curve body and the base are monolithically formed [Note that the optical curve body (14) and base (17) are not separated structures, but rather monolithically formed. This structure is similar to the monolithcal structure 105 disclosed by Applicant in figure 2];

b. a major document image placed on the base [col. 3, lines 58-col. 4, line 4. Lu explains that the optical curve body and base can be used as a “document overlay.” This is construed as placing the major document image on the bottom of base (17)].

Lu does not explicitly disclose a counterfeit protection image that is placed on a predetermined region of the base, wherein the counterfeit protection image is rendered visible in

the predetermined region of the base by incorporation of an optical decoding piece. However, these features were exceedingly well known in the art. For example, Merry discloses a counterfeit protection (deflected) image [col. 5, lines 13-19] that is rendered visible by incorporation of an optical decoding piece (lens) [col. 5, lines 27-35].

Lu and Merry are combinable because they are both concerned with counterfeit protection documents. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the document in Lu so that Merry's counterfeit image is placed on a predetermined region of the base. The suggestion/motivation for doing so would have been to enhance the security of the document against data alteration (Merry, col. 1, lines 10-12). Therefore, it would have been obvious to combine Lu with Merry to obtain the invention as specified in claim 8.

Referring to claim 10, Lu further discloses that the major document image is still in a visually recognizable state when viewed through the optical curve body [col. 3, line 66-col. 4, line 4. Lu explains that the information on the document image is neither obscured nor masked by the optical curve body, which is construed as maintaining the major document image in a visually recognizable state].

Referring to claim 11, Applicant's use of "or" between two or more limitations only requires that the prior art meet one of the limitations. Here, Merry further discloses that the marking distribution of the optical decoding piece (lens) is in a spiral pattern [col. 4, Table A. Note that the "Bitmap" lens pattern depicted in (c) is similar to Applicant's spiral pattern in figure 3A].

Referring to claim 17, Lu further discloses that the optical body curve (14) is implemented with a spherical lens array (col. 5, lines 52-53).

Referring to claim 18, Lu further discloses that the optical body curve (14) is implemented with a hemispherical lens array (col. 3, lines 6-11 and figure 1).

Referring to claim 19, Lu discloses a counterfeit protection document (col. 2, lines 5-23) comprising an optical curve body (14) and a base (17) disposed beneath the optical curve body (col. 3, lines 6-16 and figure 1), wherein the optical curve body and the base are monolithically formed together [Note that the optical curve body (14) and base (17) are not separated structures, but rather monolithically formed together. This structure is similar to the monolithical structure 105 disclosed by Applicant in figure 2].

Lu does not explicitly disclose a counterfeit protection image that is placed on a predetermined region of the base, wherein the counterfeit protection image is rendered visible in the predetermined region of the base through the use of an optical decoding piece. However, these features were exceedingly well known in the art. For example, Merry discloses a counterfeit protection (deflected) image [col. 5, lines 13-19] that is rendered visible by the use of an optical decoding piece (lens) [col. 5, lines 27-35].

Lu and Merry are combinable because they are both concerned with counterfeit protection documents. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the document in Lu so that Merry's counterfeit image is placed on a predetermined region of the base. The suggestion/motivation for doing so would have been to enhance the security of the document against data alteration (Merry, col. 1, lines 10-12).

Therefore, it would have been obvious to combine Lu with Merry to obtain the invention as specified in claim 19.

Referring to claim 21, Lu further discloses a major (document) image, wherein the major image is still in a visually recognizable state when viewed through the optical curve body (col. 3, line 66-col. 4, line 4. Lu explains that the information on the document image is neither obscured nor masked by the optical curve body, which is construed as maintaining the major document image in a visually recognizable state).

Referring to claim 22, Applicant's use of "or" between two or more limitations only requires that the prior art meet one of the limitations. Here, Merry further discloses that the marking distribution of the optical decoding piece (lens) is a spiral pattern [col. 4, Table A. Note that the "Bitmap" lens pattern depicted in (c) is similar to Applicant's spiral pattern in figure 3A].

2. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Lu, U.S. Patent No. 5,254,390 ("Lu") and Merry et al., U.S. Patent No. 7,046,804 ("Merry"), further in view of Florczak et al., U.S. Patent No. 7,068,434 ("Florczak").

Referring to claim 14, Lu and Merry disclose that the optical curve body can be either spherical or hemispherical lens arrays (col. 3, lines 6-11 and col. 5, lines 52-53), but they do not explicitly disclose that the optical curve body is implemented with a semi-cylindrical lens array.

Florczak teaches implementing a variety of different shaped lens arrays for an optical curve body, which suggests that the optical curve body is not limited to only a spherical lens

array [col. 4, lines 37-67. Florczak explains that the lens array may have any symmetry, such as spherical, cylindrical, convex, or beaded].

Lu, Merry, and Florczak are combinable because both Lu and Florczak are concerned with micro-lens sheeting systems. At the time of the invention, the Examiner notes that Florczak's teaching of implementing a variety of different shaped lens arrays for an optical curve body would have suggested to an artisan to implement a semi-cylindrical lens array for the optical curve body. The suggestion/motivation for doing so would have been to enhance the flexibility of the counterfeit protection document by providing multiple optical curve body shapes that can be used for a variety of different types of documents. Therefore, it would have been obvious to combine Lu and Merry with Florczak to obtain the invention as specified in claim 14.

Referring to claim 15, Lu and Merry do not explicitly disclose that the optical curve body is implemented with a cylindrical lens array. However, this feature was exceedingly well known in the art. For example, Florczak discloses an optical curve body that is implemented with a cylindrical lens array (col. 4, lines 50-60).

Lu, Merry, and Florczak are combinable because both Lu and Florczak are concerned with micro-lens sheeting systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the optical curve body of Lu so that it is implemented with a cylindrical lens array, as taught by Florczak. The suggestion/motivation for doing so would have been to enhance the flexibility of the counterfeit protection document by providing multiple optical curve body shapes that can be used for a variety of different types of

documents. Therefore, it would have been obvious to combine Lu and Merry with Florczak to obtain the invention as specified in claim 15.

Referring to claim 16, Lu and Merry disclose that the optical curve body can be either spherical or hemispherical lens arrays (col. 3, lines 6-11 and col. 5, lines 52-53), but they do not explicitly disclose that the curvature of the optical curve body is non-uniform.

Florczak discloses a teaching that suggests implementing a variety of different curvatures for the lens array optical curve body [col. 4, lines 37-67. Florczak explains that the lens array may have any symmetry, such as spherical, cylindrical, convex, or beaded].

Lu, Merry, and Florczak are combinable because both Lu and Florczak are concerned with micro-lens sheeting systems. At the time of the invention, the Examiner notes that Florczak's teaching of implementing a variety of different curvatures for the lens array optical curve body would have suggested to an artisan to implement a curvature of the optical curve body that is non-uniform. The suggestion/motivation for doing so would have been to enhance the flexibility of the counterfeit protection document by providing multiple optical curve body shapes that can be used for a variety of different types of documents. Therefore, it would have been obvious to combine Lu and Merry with Florczak to obtain the invention as specified in claim 16.

Allowable Subject Matter

3. Claims 1-7, 25-31 are allowed.

4. Claims 9, 12, 13, 20, 23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Alasia et al., U.S. Patent No. 5,708,717 discloses a counterfeit protection mechanism that uses a counterfeit protection image that is encoded according to different parameters and is visible only with an optical decoding lens.
- b. Alasia et al., U.S. Patent Application Publication No. 2003/0228014 discloses a counterfeit protection mechanism that uses a counterfeit protection image that is visible only with an optical decoding lens.
- c. Alasia et al., U.S. Patent Application Publication No. 2004/0264737 discloses a counterfeit protection mechanism that uses a counterfeit protection image that is visible only with an optical decoding lens.
- d. Hutton et al., U.S. Patent No. 4,033,059 discloses an optical curve body and a base for protecting documents.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kim whose telephone number is 571-272-7421. The examiner can normally be reached on Mon thru Thurs 8:30am to 6pm and alternating Fri 9:30am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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April 13, 2007